



NOVARTIS

developing vaccines based on pili proteins.

Rappuoli says he welcomed the takeover by Novartis. Despite Chiron's innovative approach to product development and considerable commercial success, it never managed to bring a blockbuster drug to market, he points out. It just didn't have the cash to push all of its promising vaccine candidates through clinical trials. "Now Novartis is bringing them through fast,

"Most of the Siena scientists are high level, publishing as much of their work as they can." — Philippe Glaser

running trials in parallel," Rappuoli says. And researchers at the bench are pleased to have access to some of Novartis' powerful research resources in areas such as bioinformatics. The future may be less bright for the 70 or so vaccine researchers who worked at Chiron's other main laboratory at Emeryville. Rappuoli is moving the unit to Boston, to be close to the drug researchers at the Novartis Institutes for Biomedical Research. "In the next 15 years," he says, "we'll pioneer a new field of combined therapy and immunotherapy." Combined vaccine and drug approaches could yield dividends in areas such as cancer or AIDS, he adds.

Novartis is already bankrolling another of Rappuoli's long-term visions — a separate research institute on the Siena campus, dedicated to developing vaccines for use in developing countries. Novartis has agreed to equip and staff the laboratory, which will look to foundations such as the local Monte dei Paschi di Siena and the Bill & Melinda Gates Foundation to support its research projects. ■

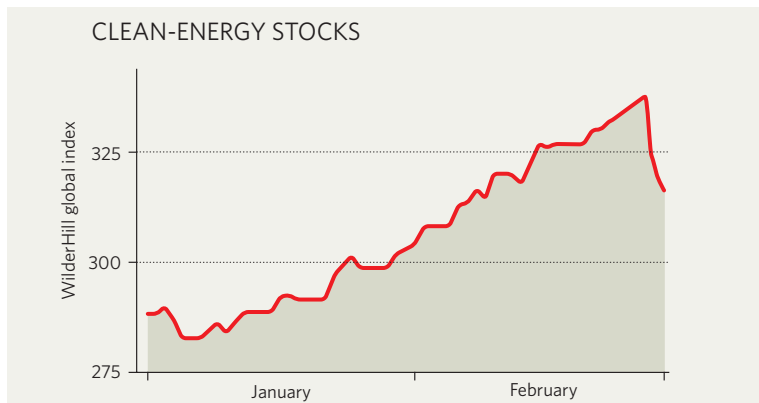
IN BRIEF

FLU VACCINE The US Food and Drug Administration is set to approve the first vaccine for use in an avian flu pandemic. An advisory committee said the regulator should approve the vaccine, made by Sanofi-Pasteur, the vaccine arm of Paris-based Sanofi-Aventis. The vaccine against the H5N1 strain of bird flu is only mildly effective, however, and will not be sold commercially. It is being bought by the US government for limited use in the early stages of a pandemic, before a vaccine better matched to the actual pandemic strain becomes available (see *Nature* 437, 619; 2005).

GREEN BUYOUT Plans for eight coal-fired power plants in Texas look likely to be scrapped as part of a proposed buyout of Dallas-based electricity generator TXU Energy. The US\$45-billion deal between TXU and investors led by Kohlberg Kravis Roberts & Co. and Texas Pacific Group was endorsed by major environmental groups when it was announced on 26 February. The buyers say that as well as revising the plans for new power stations, they will commit to cut carbon dioxide emissions back to 1990 levels by 2020, and adopt strict environmental rules.

ABANDONED SPACE A six-year effort to launch a commercial space facility in Texas has been abandoned. Brazoria County, outside Houston, created the Gulf Coast Regional Spaceport Development Corporation in 2000, hoping that it could find a private company to develop leased land into the world's first base dedicated to commercial space travel. But the county government said on 27 February that it was giving up on the idea.

MARKET WATCH



The stars have certainly been aligned in favour of clean-energy stocks early this year, as growing acceptance of the need to reduce greenhouse-gas emissions has bolstered the value of companies with interests in non-fossil-fuel sources of energy.

For 18 months, *Nature* has been tracking the value of a group of US-based energy companies. But this week we shift attention to an international selection of companies, which reflects the market for clean energy outside the United States. The WilderHill New Energy Global Innovation Index — NEX on the American Stock Exchange — tracks the weighted values of about 60 of these companies around the world.

At least until global markets dipped last week, the NEX index had been moving strongly upwards. The release of the fourth report from the Intergovernmental Panel on Climate Change on 2 February lent further impetus to a corporate trend in favour

of clean energy, says Rob Wilder, founder of WilderShares, the California company that co-compiles the index with London-based New Energy Finance. "Even conservative people have been pushing their reservations aside and getting on board," he says. "They are saying: 'we don't love Al Gore, but there's money to be made'."

And Wilder notes that quiet and determined corporate moves into the sector — such as a low-key 8 January announcement by US food giant Cargill that it is creating a subsidiary to build ethanol-processing plants — hint at good long-term prospects.

Even the global stock market correction on 27 February, which saw the Dow Jones fall by more than 400 points, confirmed the ebullience of the sector, says Michael Liebreich, head of New Energy Finance. "It was obviously hit by the correction," he says, "but less so than some main market indices." ■

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